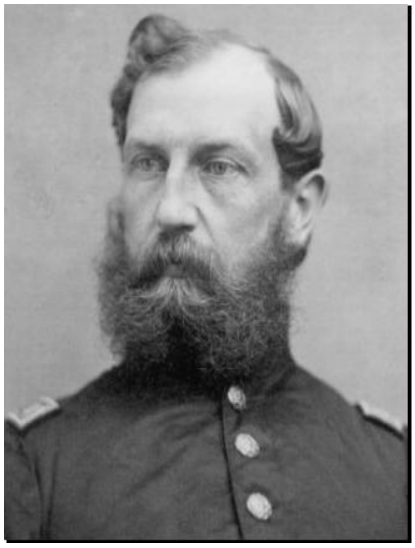
ORDNANCE HALL OF FAME

2001

HISTORICAL INDUCTEES

CAPTAIN AND BREVET LIEUTENANT COLONEL
GEORGE T. BALCH



Captain Balch's most significant service to the US Army Ordnance Corps clearly took place between September of 1863 and September of 1864, during which time he served as the Army's de facto Chief of Ordnance by order of Secretary of War Edwin M. Stanton.

In September 1863, Brigadier General James Ripley was obliged to step down as Chief of Ordnance. Many problems had developed during his tenure, most notably his continuing refusal to utilize and promote newly developed weapons for the Army. President Lincoln and his Secretary of War, Edwin M. Stanton, disagreed about who should take his place. The Civil War had reached a critical stage in the aftermath of the Battle of Gettysburg, and it was imperative that the Army's Ordnance Department continues to provide the best possible support to the combat branches. Lincoln wanted to elevate COL George D. Ramsay, Commandant of the Washington Armory, to the post of Ordnance Chief. Mr. Stanton, strenuously resisted and sought to promote Captain Balch, then an assistant in the Ordnance office. Lincoln and Stanton compromised. Ramsay was promoted to brigadier general and given the title of Chief of Ordnance, but without his knowledge, Balch was placed in charge of the Office, Chief of Ordnance, and was given substantive control over its operations. Ramsay was a figurehead chief, while Captain Balch made virtually all-essential decisions. For a year, Balch, operated as Chief. Stanton's biographers Benjamin Thomas and Harold Hyman have stated that Balch, though nominally Ramsay's principal assistant, was actually Ramsay's "overseer." With Stanton and Ramsay, his two superiors, continually quarreling, Balch, a most capable officer, was caught in the middle of an impossible command situation. In light of this fact, the long-forgotten Captain Balch deserves great credit for having kept the Ordnance Department functioning smoothly and effectively at a critical juncture during the Civil War. He made certain that urgently needed weapons, munitions, and equipment were kept flowing to the front lines. He left the affairs of the Ordnance Department in such excellent shape when he departed for his next assignment that its accounts were the first to be settled after the Civil War ended.

In September 1864, Captain Balch was transferred to instructional duties at West Point for the academic year 1864-1865. He then was placed in charge of the Charleston, SC Arsenal, where

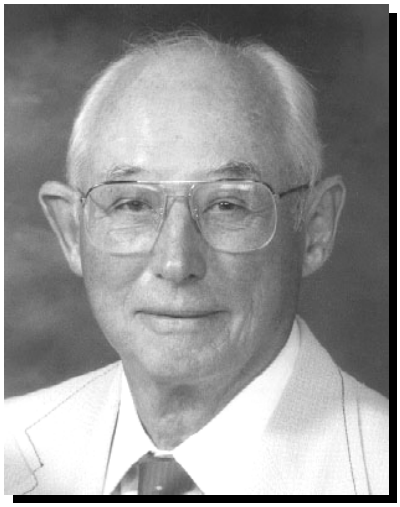
he began the task of bringing that facility back into full operation following the destruction done to it at the end of the Civil War. He resigned from the Army in December 1865. Placed in an extremely awkward situation in the middle of the Civil War, Captain Balch performed his duties in an outstanding manner.

In later life, Balch was an official with the Erie Railroad, a firm that had previously suffered from mismanagement. As company auditor, he developed an accurate, exhaustive, and much-needed system of inventorying the company's property. His experience as an Army logistician was of great benefit in this connection. When the company went into receivership, he drew up a comprehensive inventory of its assets for its English bondholders, which was said to have been the most complete document of its kind ever written. This activity in turn led him to publish several technical volumes concerning the nature of railroad property, plants, right-of-way, and other related issues.

Toward the end of his life, while auditor of the New York City Board of Education, he devoted much effort to promoting patriotism in the children of the nation's public schools. A motto he drafted in this connection, "We give our heads and hearts to God and our country; one country, one language, one flag!" was adopted by a number of schools in many states. It was Captain Balch who proposed that flagpoles be erected on or in front of all the public schools in the nation, and he became nationally known for his work on this project.

Captain Balch's service to the Ordnance Department and his country during a most critical time in its history has never—because of its unusual nature--been properly recognized, and he is deserving of induction in to the Ordnance Hall of Fame.

DOCTOR
ALEXANDER C. CHARTERS



In 1938, Dr. Alexander C. Charters received his PhD in Aeronautics and Mathematics from the California Institute of Technology and, after a year of post- doctoral studies, joined the newly established Ballistic Research Laboratory (BRL) at Aberdeen Proving Ground, Maryland. With war enveloping Europe and the Far East, Dr. Charters joined the scientific staff of the BRL in a period of rapid expansion of the research facilities and capabilities to meet the inevitable involvement of the United States in World War II. One of Dr. Charters initial scientific advancements at BRL was the development of the first reliable spark photography instrumentation for experimental measurement of the aerodynamic properties of projectiles, bombs and rockets. The first spark photograph of a 0.30 cal projectile in flight was taken on June 28, 1940. Dr. Charters was instrumental in developing the needed triggering devices that would subsequently allow the installation of a series of timed spark cameras to be used to measure the drag, lift and moment of a projectile. In 1940, Dr. Charters was a member of the First Scientific Advisory Committee of the BRL, which would guide the scientific direction of vital research conducted during the war.

When the United States entered World War II, Dr. Charters was the Chief of the Aerodynamics Unit of BRL and was given the task of developing the first Aeroballistic Range which, with further developments in spark photography and measuring techniques, was completed in early 1944. The initial prototype range consisted of five spark stations and the final 300-ft long range consisted of twenty permanent spark stations. This unique facility contributed significantly to advancing the understanding of the aeroballistics of projectiles and is still in use today at the U.S. Army Research Laboratory (ARL) that subsequently incorporated BRL and it's facilities. In 1982, the Aerodynamic Range was designated a "National Mechanical Engineering Landmark" by the American Society of Mechanical Engineers. The range is recognized as the world's first, large-scale, fully instrumented ballistic range providing data on the aerodynamic characteristics of projectiles in free flight and became the model for similar installations worldwide. Dr. Charters was awarded a Commendation for Exceptional Civilian Service by Secretary of War Stimson for his contributions to the war effort.

In 1946, the rapid advancement of larger caliber projectiles required the development of a larger spark photography range and the advent of supersonic aerodynamics generated the need

to test at velocities in the transonic region which bridges the subsonic and supersonic regions. The new facility would accommodate projectiles up to 203-mm and by 1950, the Transonic Range was completed and operational. The size of the building was 24-ft X 24-ft x 1000-ft and the facility is also still in use today at ARL. Dr. Charters was instrumental in the development of these two unique research facilities and the research conducted in these two facilities.

In 1951, Dr. Charters left BRL to become Chief of the Hypervelocity Ballistics Range Branch of the National Aeronautics and Space Administration's Ames Research Center. The primary research of his team involved the development of a light gas gun for tests of reentry vehicles and components of high velocity missile components. The development of the tapered "accelerated reservoir" concept in the pump section of the light gas gun in his Branch allowed the launching of fragile aerodynamic models eventually to 8 km/s. This design is used in most light gas gun designs today. Dr. Charter was instrumental in the development of early hypervelocity guns and these early hypervelocity impact experiments contributed significantly to understanding planetary impact phenomena and the correct interpretation of lunar and planetary imagery for the soon to come space exploration program.

In 1961, after 10 years at NASA Ames, Dr. Charters joined the General Motors Defense Research Laboratory in Santa Barbara, CA. where he designed and built the "GM gun", the largest two-stage light-gas gun of its time. This gun was capable of launching masses of several hundred grams to velocities over 7 km/s. Nearly 40 years later, this gun is still one of the largest in the world and is still operational, now located at the University of Alabama in Huntsville.

He left GMDL in 1967, and consulted with numerous organizations concerning the design, construction and use of advanced high velocity guns. In 1974, he joined the Naval Weapons Center at China Lake where he was involved in numerous ballistics efforts, but probably made his most significant contributions in the area of the interior ballistics of liquid propellant guns.

In 1982, Dr. Charters returned to Santa Barbara, joining the General Research Corporation, and focused on terminal ballistics, especially at high impact velocities. During this period, Dr. Charters made significant contributions to understanding hypervelocity impact phenomena and played a leading role in investigating the potential of advanced high-velocity projectile concepts such as the segmented rod.

For his sustained leadership, innovation, technical excellence, and contributions to ballistics and hypervelocity science for over fifty years, Dr. Charters was awarded the first Distinguished Scientist Award by the Hypervelocity Impact Society in 1989. After retirement, he remained active in his field and was named a Senior Institute Fellow of the Institute for Advanced Technology of the University of Texas at Austin, Texas.

LIEUTENANT COLONEL
HARRY M. "BULLDOG" DOWNER

LTC Downer served as the Chief of the Automotive Division, Ordnance Section, Eighth United States Army Korea. As chief, he was charged with the responsibility for the supply and resupply of vehicular equipment and critical spare parts and accessories for all United Nations Forces and the logistical support of Detachment 1, 47th Light Aircraft Maintenance Company. LTC Downer ensured the most efficient and expeditious allocation of vehicles to those units where most vitally needed, and made a daily evaluation for the vehicles, critical spare parts, and major items on hand in the depots and maintenance companies. He made frequent trips, without regard to his personal safety, over guerrilla-infested roads in close liaison with forward units to ensure firsthand knowledge of the vehicular problems. During the period when, due to overwhelming enemy attack, complete battalions were overrun with a loss of much of their vehicular equipment, the foresight, initiative, and preparatory planning ability of LTC Downer ensured prompt and efficient resupply to all units.

In December 1951, LTC Downer was the chief instructor to teach the First Army Field Force Commander's Preventive Maintenance Course to general officers and senior field grade officers. Several general officers that received this course felt it was the best training available. MG MacMorland, MG Horkan, MG Holman, and BG Slaughter commended his performance. He prepared lesson plans, supervise six enlisted men who assisted in the course of instruction, and devise the floor display of ordnance equipment used as training aids.

From November 1957 to March 1958, LTC Downer served as a civilian consultant to the Commanding General, USAOTC, stationed at Fort Knox, Kentucky. He was assigned to the Senior Commander's Preventive Maintenance Course. These duties included the determining of ordnance material to be displayed and used in instruction and determining ordnance information and doctrinal material to be presented to students. LTC Downer was responsible for preparation of the program of instruction as it pertained to ordnance. He conducted research, prepared lesson plans and manuscripts, and instructed the officers and enlisted instructors in facets of this resident course of instruction presented to general and field grade officers on a college level. This instruction covered ordnance material in all major fields; ammunition, supply, wheeled and tracked vehicles, guided missiles, shop operations, artillery, small arms, and instruments.

MG Olbinger, Jr., BG Maddox, and BG Rozier felt that LTC Downer should be considered the "father" of Qualitative and Quantitative Personnel Requirement Information (QQPRI). He developed the MOS studies for the 63-series career management field. He also had a great deal of input to all QQPRI and MOSs that effect maintenance TOEs today.

As the Doctrine Specialist, Doctrine Division, Office of Doctrine Development, Literature, and Plans, and in the Organization and Evaluation Division, Office of Deputy Commandant for Combat and Training Development, he served with outstanding results. LTC Downer was the primary action officer for the 58 MOSs for which the school had proponency. His vast experience and outstanding professional competence in the performance of all assigned duties enabled him to make highly significant contributions to mission accomplishment.

LTC Downer also performed exceptionally as a Doctrine Specialist, Organization Division, Directorate of Combat Developments, U.S. Army Ordnance Center and School. As a result of his comprehensive knowledge and recognized expertise in the field of QQPRI, he contributed invaluable and significant assistance on numerous projects of far-reaching Army-wide impact, such as the DIVAD, MLRS, M1 TANK, BFVS, and HEMTT. LTC Downer's comprehensive analysis of the adequacies and shortcomings of technical training requirements and MOS selections in support of developmental and current equipment has proven him an invaluable asset to the U.S. Army Ordnance Center and School.

LTC Downer gave more than 40 years of loyal service to the Ordnance Corps - 15 years of military service and 25 years of civilian service. Forty years of loyal service and immense personal and professional ability make "Bulldog" Downer worthy of induction into the Ordnance Hall of Fame.

BRIGADIER GENERAL
THOMAS K. VINCENT

During his long military career as an officer of the Army Ordnance Corps, General Vincent served with distinction in assignments of broad responsibility during World War I, World War II, the Korean War, and through all the intervening years. His technical experience in artillery design, proving ground administration, and rocket and missile development was unusual. No other officer in the long and memorable history of Army Ordnance served in such field with greater vigor or had more widespread responsibility.

As a young Field Artillery officer, he served during World War I at Fort Leavenworth, Kansas, and Fort Sill, Oklahoma, followed by duty in the Philippines. The Field Artillery of those days offered little opportunity for an honor scholar in engineering, so Lieutenant Vincent transferred to the Ordnance Corps in July 1920. After a brief indoctrination, he served at Frankford Arsenal, Philadelphia, and later as the Adjutant, Raritan Arsenal, New Jersey. In 1924, he was assigned to the important post of Ordnance Officer for the Camp Perry, Ohio, National Matches.

In 1925, the General launched on his advanced 2-year technical course at the Ordnance School at Watertown Arsenal, then under the famous Colonel Tracy Dickson. The greater part of the curriculum was conducted at the Massachusetts Institute of Technology, supplemented by practical work at Watertown. He remained at this arsenal for 4 more years as officer in charge of the Cold Working Division.

In 1931, General Vincent entered the Army Industrial College, Washington, D.C. After graduation in June 1932, he started his first assignment in the Office, Chief of Ordnance, being assigned to the Artillery Division of the Manufacturing Service. During this assignment, he directed the activity that pioneered in America the development of the process for strengthening cannon by radial expansion under hydraulic pressure. This process greatly improved the overall strength and endurance of the cannon tubes. After 3 years of concern over procurement of artillery with the meager funds available, the General was transferred to the Proof Division at Aberdeen Proving Ground, Maryland. Following this, he returned to the Office of the Chief of Ordnance for a tour as chief of the Small Arms and Small Arms Ammunition Division, and then went to the Hawaiian Department as Assistant Ordnance Officer.

The gathering clouds of war abruptly curtailed the General's duty in Hawaii. He was recalled to the United States in December 1940 and given the task of building and commanding the Erie Proving Ground at Lacarne, Ohio, where practically all World War II artillery and tank armament received final acceptance tests. With Erie in full-scale operation the General was transferred back to the Office of the Chief of Ordnance in Washington in August 1942 for another long tour. He was successful as the Executive Assistant to the Chief of Field Service, Assistant Chief of the Production Service Division, and the Chief of Redistribution and Salvage. Thus, during World War II he carried a tremendous workload in connection with the heavy output of armament required by our armies throughout the world.

In February 1946, the General was appointed production manager of the Springfield Armory, followed by a detail in Europe as Special Assistant to the Chief of Ordnance, European Command, and later as Commander of the Ordnance Depot, Griesheim, Germany. December 1948 found him back in proving-ground activities, this time as Deputy Commander of Aberdeen. In June 1951 he was promoted to Brigadier General and given additional duty as Commanding General of the Ordnance Training Command just as rapid increases in trained Ordnance officers were demanded to meet the expanding requirements of the Korean War.

In June 1952, General Vincent was appointed Commanding General of Redstone Arsenal, Huntsville, Alabama. Here, he was in the thick of development of the Army's first generation of Ordnance rockets and guided missiles, and saw the first two systems into the deployment phase--the NIKE AJAX antiaircraft missile in March 1954 and the HONEST JOHN rocket in June 1954. The missile systems then under development were the CORPORAL, LACROSSE, REDSTONE, HAWK, and NIKE HERCULES. In addition to directing the development of Army rockets and guided missiles, General Vincent oversaw the production of chemical artillery ammunition for the U.S. Armed Forces at the height of the Korean War.

From Redstone Arsenal, General Vincent retired on 31 August 1954, after 37 years of devoted commissioned service. In keeping with his vast interest in and knowledge of ordnance and his lifelong attachment to the American Ordnance Association, he became staff consultant for the Technical Divisions and Committees of the Association at national headquarters in November 1954.

In his brief 2 years as guide and mentor for the widespread American Ordnance Association Technical Divisions and Committees, General Vincent's friendly and tactful approach to the problems within the armed services continued to cement the close relationship of industry and the services.

ORDNANCE HALL OF FAME

2001

CONTEMPORARY INDUCTEES

- Ordnance Corps Hall of Fame -
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BRIGADIER GENERAL
RICHARD F. ALLEN

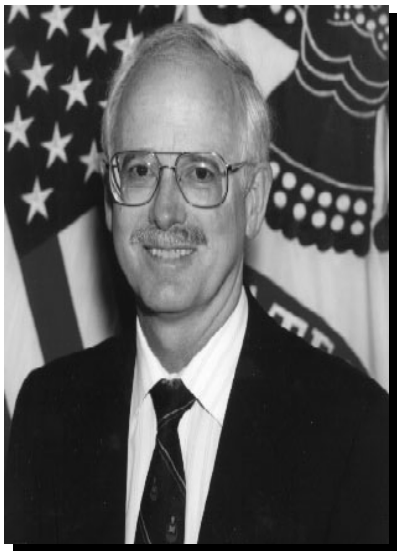
Born in Hunstville, Alabama on 24 May 1941, Richard F. Allen attended Florence State College, Distinguished Military Graduate and received a commission as a second lieutenant in Field Artillery. His first assignment was to USAREUR in the Field Artillery followed by assignments that included supply officer and then commander of the 184th Ordnance Company and as an ammunition officer in the 84th Ordnance Battalion. Upon his return to United States in November 1966, he attended officer courses at the OMMCS, Redstone Arsenal and the OCS, Aberdeen Proving Grounds.

He served in the Republic of Vietnam during 1967-1968 while commanding the 148th Ordnance Company (AMMO), the most decorated ammunition company in Vietnam, and then the Headquarters and Headquarters Company, 53rd General Support Group. He commanded the 148th Ordnance Company through the 1968 Tet offensive with distinction by providing much needed munitions to units within the IV Corps, III Corps and Vung Tau Tactical and Special Zones.

In 1970, he resigned from the Regular Army and accepted a commission in the United States Army Reserve. Through successive USAR assignments, staff positions and commands with the 375th Field Depot in Montgomery, Alabama and the 310th Theater Army Area Command in Fort Belvoir, Virginia, he attained the rank of Brigadier General and commanded the 3rd Transportation Brigade in Anniston, Alabama during 1985-1989. Brigadier General Allen has published various articles in military publications reflecting an astute understanding of Army logistics.

In June 1999, General Allen was appointed Civilian Aide to the Secretary of the Army for the State of Alabama. Since that time he has written numerous articles highlighting Army activities in Alabama and calling attention to the veterans of "The Forgotten War" as a member of the Governor's Committee to Commemorate the 50th Anniversary of the Korean War. As Civilian Aide, General Allen has spoken to numerous civic clubs and military organizations. He was awarded the State of Alabama Distinguished Service Medal in April 2000 for his work in recognizing Korean War veterans; the National Guard Association Patrick Henry Award in September 2000; and a Citation for Exceptional Service in Support of National Defense by the Association of the United States Army in October 2000.

MISTER
FRED R. DEARBORN



Mr. Fred Dearborn served as the Rock Island Arsenal's Civilian Executive Assistant (CEA) for 17 years, from January 1982 to August 1999. He was a staunch advocate of the arsenal's manufacturing mission throughout his period as the leading civilian employee of the RIA. He especially believed in the vital role of field artillery, its firepower and the coverage it provided American soldiers in combat. For this reason, he insisted that the weapons built and fabricated at Arsenal Operations shops had RIA-quality built into their recoil mechanisms, carriages, and gun mounts.

Fred Dearborn began his 31-year Civil Service career as a member of the internship program at Red River Army in 1968, but it was at Rock Island Arsenal that he made his greatest contributions to Army ordnance. In the 1980's he distinguished himself as a general engineer of the Program Manager for Cannon Artillery Weapons Systems field office, at Rock Island Arsenal. He received the Meritorious Civilian Service Award in 1980 for the successful fielding of the 155mm M198 Towed Howitzer. Under his leadership, RIA continued to produce M45 Recoil Mechanism Assembly for the 155mm M198 Towed Howitzer. He managed successfully the production of key components of the 155mm M198 Towed Howitzer, including the sophisticated M45 Recoil Mechanism System and many M39 Carriage Assembly Systems. This responsibility included the final assembly of M198s and their delivery to units being deployed overseas during Operations Desert Shield/Desert Storm in 1990-1991. He was instrumental in the RIA's overall outstanding production support during the war. He also championed the RIA's efforts to remain a primary player in the design and production of new howitzers and gun mounts, which included the 155mm XM204 Towed Howitzer, the 105mm M119A1 Towed Howitzers, the future Direct Support Weapons Systems, and the Crusader Gun Mount. In retirement, Mr. Dearborn remains actively involved in community affairs. He was instrumental in the formation of the Manufacturing Technical Consortium for small and medium businesses and continues to champion the use of RIA resources for the benefit of the Army, as a member of the Quad City Development Group Board of Directors. He provided oversight, leadership, and guidance from his Arsenal CEA position in

developing strategic plans and economic justifications for Project REARM (Renovation of Armament Manufacturing), a $222 million project at RIA, which was completed in 1981.

Mr. Dearborn obtained the necessary approvals for REARM construction through the chain of command to the highest levels of the Department of the Army and the Congress. REARM construction began at RIA in 1983 and was completed in 1988, on schedule and under budget. These items included gun mounts for the Army tank program; gun mounts for self-propelled artillery; the Contract Maintenance Truck Heavy; the Forward Repair System; majority of the Army Tool Sets; the refurbishment of M114 and M101 Howitzers for allies in Southwest Asia; and armor kits for shipment to Bosnia. RIA completed the repair of 116 M114, 155MM, Towed Howitzers and delivered them to the Bosnian Government ahead of schedule. Rock Island Arsenal also supported U.S. troop deployments to Bosnia by quickly providing high priority armor kits for installation in the cabs of 166 5-ton trucks, 54 Palletized Loading Systems, and 200 other vehicles. The armor kits were designed to better protect soldiers driving and riding in the vehicles from land mine explosions and sniper fire.

Fred Dearborn was recognized for his technical expertise in engineering, weapon system management, quality and other arsenal industrial operations. His leadership was instrumental in RIA achieving Strategic Business Plan goals and RIA finishing in the top ten for the President's Quality Award. During his tenure as CEA RIA was selected a winner in the Army's Communities of Excellence Awards for FY 1998, 1999, and 2000.

Mr. Dearborn accepted a special assignment at the request of the Commanding General, U.S. Army Industrial Operations Command (IOC) to act as IOC Program Manager for the Army Workload and Performance System (AWPS). In this capacity he was extremely effective in gaining the necessary support for this high-visibility program and in guiding its implementation in such a manner as to achieve remarkable success. The implementation of AWPS as a management tool will enhance the IOC's and the Army's ability to justify personnel requests based on the workload to be accomplished. AWPS was implemented at five IOC maintenance depots.

COMMAND SERGEANT MAJOR
RICHARD C. EAGAN

Increasing levels of responsibility and imaginative ideas marked command Sergeant Major Richard C. Eagan's career. He always found innovative solutions to mission and training problems. His concern for his soldiers, training solutions, and imaginative approaches to the missions were the hallmarks of his service. The assignments to Infantry and Armor Divisions, Non-Divisional Maintenance Units and Logistics Commands, Cavalry Regiment, and the Ordnance Center and School provided him with the diversified training and opportunities to develop ordnance soldiers and represent the highest traditions of the Ordnance Corps.

After being assigned to Vietnam, he was the only Fuel and Electrical System repairman sent forward to support the non-divisional units attached to the 1st Infantry Division, and later those attached to the 25th Infantry Division. He returned to the Ordnance Center and School after being promoted to Specialist 5 and returning from Vietnam. His skills as an instructor were commended and he was soon assigned as the senior instructor for week 6, night shift, of the Fuel and Electrical System Repair Course. SP5 Eagan returned to Vietnam and was assigned as the NCOIC of the Fuel Repair Section of a General Support Maintenance Company. He was promoted to Staff Sergeant and assigned as the assistant shop foreman for the refurbishing of wheel vehicles to be transferred to the South Vietnamese Army. When the wheel vehicle mission was suddenly converted to a track vehicle mission, SSG Eagan was given the responsibility of locating repair parts and transferring them to the general support maintenance facility.

At Fort Carson, Colorado his talent as an instructor was put to good use training organizational repairman on the proper maintenance of electrical power generating equipment. As the only Ordnance soldier assigned to that course, he was instrumental in streamlining the course and aligning it with the actual equipment the soldiers would be repairing at their units.

His performance as an automotive inspector was marked by his program of on the spot repair of vehicles at the point of initial inspection resulting in reducing the existing backlog.

He returned to Fort Carson and was assigned to the 704th Maintenance Battalion. His assignment as the NCOIC for the battalion F&E repair shop was highlighted by the complete

overhaul of the shop and its operation in three weeks. Training the F&E system personnel, he converted over 500 work orders to the computerized system overnight with no loss of support to the units. After being promoted to Sergeant First Class, SFC Eagan was assigned as the Repair Control Sergeant for the Heavy Maintenance Company of the 704th Maintenance Battalion. Here he organized the quality control, administration, and operations. These actions resulted in a reduction of the backlog from over 500 pieces to just over one hundred in less than two months. SFC Eagan was later selected as the Company First Sergeant.

SFC Eagan was again assigned as First Sergeant, this time to the 586th Maintenance Company in the 3d Armored Cavalry Regiment. After refining the DS maintenance program, SFC Eagan was key in developing the organizational maintenance program for the Regiment. Here he earned the distinction of being selected as the first Ordnance soldier inducted in the elite Old Bill Association of the 3d ACR. The first female soldier inducted was one that SFC Eagan had trained and also an Ordnance soldier.

He was promoted to Command Sergeant Major and assigned to Aberdeen Proving Ground as the Battalion CSM of the 143d Ordnance Battalion. He was instrumental in developing the first multi-echelon-training program for Advanced Individual Training and 63B Basic Noncommissioned Officer Course students. Returning to Germany as the CSM of the 122d Main Support Battalion, 3d Armor Division, CSM Eagan continued to develop soldiers and had more inductees to the Sergeant Morales club. His proven performance resulted in his selection as the CSM for the 16th Corps Support Group, 3d COSCOM. Here, among other achievements, he coordinated the first joint Battle Damage Assessment and Repair training activity with the German Army. Ordnance Soldiers from the 8th, 19th, and 85th Maintenance Battalions trained with the German Army in Aachen, Germany. After his assignment in Europe CSM Eagan was assigned as the CSM, Division Support Command, 5th Infantry Division. He enhanced the quality of life for his soldiers and their families and was selected, over the combat arms CSM's, as the CSM, 4th Infantry Division (Rear) and Fort Polk; a significant achievement for an Ordnance Soldier. CSM Eagan took great pride in his soldiers, instilled a winning spirit, and developed camaraderie at the highest possible levels throughout his exceptional career.

COMMAND SERGEANT MAJOR
JOHN L. HOFFMAN

John L. Hoffman served as the Command Sergeant Major of the USAOMMCS between 31 July 1991 and 11 January 1996. During his tenure, he succeeded in accomplishing a number of noteworthy objectives that were important to the well being of the school and thus enhancing the Ordnance Corps. One major objective involved the consolidation of enlisted courses in Career Management Field 55 (Ammunition) in order to meet the demand of declining resources. He oversaw the development of a draft proposal, outlining the consolidation, that led to the establishment of three new programs of instruction for Advanced Individual Training, Basic Noncommissioned Officer Course, and Advanced Noncommissioned Officer Course. The consolidation eliminated separate courses for these classes.

In another area of munitions, CSM Hoffman played a major role in the inactivation in 1992 of the school's 515th Ordnance Company whose mission centered on training soldiers in Nuclear Weapons Specialty. That action was in direct response to a presidential order directing the Army to reduce its nuclear weapons capability.

CSM Hoffman was heavily involved in updating the Army's Noncommissioned Officer Leader Self-Development Career Map explaining how a noncommissioned officer could become a better leader and improve the chance for promotion. CSM Hoffman participated in a major initiative affecting the Reserve Components Regional Training Sites for ammunition where the Army's Total Force could conduct needed training in support of wartime missions. That initiative had gained acceptance during Operation Desert Shield/Storm, when the army had identified training requirements peculiar to the use of the combined active and reserve component forces on the battlefield. CSM Hoffman forwarded the concept plan for the sites to the appropriate army commands in May 1992.

He played an instrumental role in the establishment of a new training department at Fort Gordon, under the control of the USAOMMCS, for the purpose of training soldiers in electronic maintenance specialties. When the army removed the HAWK missile system from its inventory

in 1993, CSM Hoffman oversaw the consolidation of the system's training to meet the needs of the Marine Corps and the National Guard that still used missile system.

Undoubtedly one of the most important undertakings in which CSM Hoffman was involved while in the position of Command Sergeant Major of the school was the CASCOM Reorganization of 1994. As the most senior noncommissioned officer, he planned and directed various changes within the organizational structure of the school to comply with the guidelines of the Army's directive. The result of the most extensive reorganization to ever occur at the school was a change in organizational structure from a USATRADOC standard school model to a USATRADOC Brigade structure for combat service support schools.

CSM Hoffman's numerous years of dedicated service and significant contributions to the Ordnance Corps ensured a place for him in our history and the Ordnance Hall of Fame.

CHIEF WARRANT OFFICER FIVE
CECIL E. HUTSON

After serving several years as a Gun Crew Chief, Cecil Hutson transferred to Missile Maintenance serving both with the AJAX and the Nike Hercules. He attended the Army Nuclear Weapons Assembly Course at Albuquerque, New Mexico in 1962 and spent three years as NCOIC of the Nuclear Weapons Assembly Team with the 137th Ordnance Co, Okinawa. Due to his exceptional service in that assignment, he was selected as the Nuclear Weapons Advisor the Chief of Maintenance, DCSLOG, 5th U.S. Army. His responsibilities included development of Policy and Procedures for all subordinate elements of the 5th U.S. Army as well as insuring implementation of Policy and Procedure of higher headquarters.

Mr. Hutson applied for and was appointed a Warrant Officer in February 1967. It was after this that he made his most significant contributions to the Ordnance Corps. His first assignment as a Warrant Officer was Nuclear Weapons Officer and Technical Inspector for XVIII Airborne Corps. He made significant contributions to the Corps Nuclear Planning and Maintenance Programs. He wrote Policy and Procedures that outlined compliance and Inspections Responsibilities for all XVIII Airborne Corps elements. He was then assigned as Quality Control Officer, Assistant Operations Officer and Nuclear Weapons Assembly Team Chief in 1972 for the 69th Ordnance Company. Not only did he ensure efficiency in his areas of responsibility, but spent many hours of extra time to manage a COMSEC account as well as use his managerial experience in the units motor pool and supply operations. His quality control program enabled his unit to score very high during USAREUR TPI inspections with his areas receiving excellent ratings. After his exceptional service to the 69th Ord Co., Cecil went to HQ, SETAF for a short time where he conducted Technical Assistance/Surety Evaluation visits to USASETAF units. His vast knowledge and experience aided unit commanders and significantly contributed to upgrading the mission capability of SETAF custodial commands.

He was assigned to HQ AMCCOM, in June 1980 where he became the Army Maintenance Manager for the fielded M422 and the experimental XM753 eight-inch Nuclear Weapons Systems.

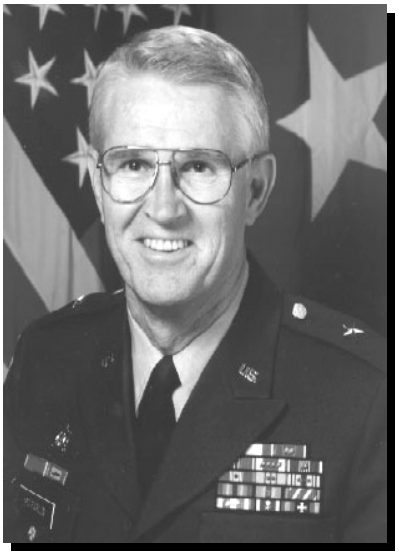
He effected flawless monitoring of the Army World Wide Readiness Posture for these critical Nuclear Weapons Systems. By detailed analysis of CONUS weapons systems distribution and maintenance accomplishment reporting procedures, he astutely determined that Army received limited readiness data on numerous Army systems stored by Navy. Following inter-service coordination, he personally caused return of these systems to Army custody and subsequently complete operational readiness reporting.

He returned to HQ, AMCCOM in April 1984 after a short tour to Korea's 8th Army as the Chief Nuclear Surety Team Chief. He was instrumental in ensuring that the surveillance manual was accurately written and technically correct. According to the maintenance technical manuals. His efforts resulted in 71 recommended changes to the 8" Technical Manual. His work involving the return of over 400 items from overseas Cecil devised a repair procedure for the training H1343 shipping and storage container that had an estimated first year saving of over $180,000.

Mr. Hutson was assigned to HQ, 4th Army in Jan 1990 where he provided nuclear weapons assistance to reserve units assigned to the 4th U.S. Army. He also assisted the disbanding of the 4th U.S. Army and transfer of functions to other Army elements. He was assigned duties at AMCCOM in October 1991 that put him directly responsible for the retrograde and demil of items returning from overseas. He was the Army's last nuclear weapons technician to be directly involved with the removal of weapons from overseas. He performed this function without error. He published and provided instructions, which assisted the nuclear weapons draw down at the installation level (e.g., nuclear PRP, termination guidance, rescinding the depot's mission capability statement, and achieving instructions for nuclear mission records). He has proved to be the Army's expert on Nuclear Weapons.

His reputation had preceded him. He was becoming known as the Army's expert on Nuclear Weapons and an exceptional officer capable of performing a myriad of functions with excellent results. Cecil Hutson served more than 45 years in the United States Army with over 35 years in the Nuclear Weapons Field. He was recognized in April 1996, by General Dennis Reimer, Chief of Staff, Army, as the last active duty soldier who served in the Korean War.

BRIGADIER GENERAL
ROBERT P. MCFARLIN



BG(R) McFarlin commanded the 705th Maintenance Battalion, part of the 5th Infantry Division (Mech). His most significant accomplishments there were in the areas of ASL mobility, improved division readiness, and leader development. At Rock Island Arsenal as Director of Material Management and Chief of Staff his most significant contributions were in the areas of improved use of the Army's money for procurement of armament items, tools and repair parts, and in developing the civilian work force to lead and take responsibility.

At the 5th Infantry Division (Mech), he commanded the DISCOM reorganizing it into the multi-functional battalion organizations. Again, leader development was a big issue.

Following the DISCOM tour he was assigned at USAOC&S as the Assistant Commandant. While at APG and under his guidance, the school revamped the curriculum of almost all the courses to include ANCOC and BNCO and both the officer Basic and Advanced Course.

Following the tour at APG he was assigned as CG, 2D COSCOM, leading that organization in Germany and in Desert Shield/Desert Storm. Not only did they succeed on the battlefield, he was again very successful in leader development.

After Desert Storm he was assigned to command the 200th TAMMC at Zweibrucken, Germany. He was simultaneously responsible for maintenance of readiness, paying the bills for the European Commissary System, managing the administrative vehicle fleet and the Trans-European pipeline as well as managing a lot of the redistribution of material incident to the draw-down in Europe. Returning to CONUS he completed his career as Executive Director of the Defense Distribution system. The mission was to fold all the various service supply depots into the DLA depot system. He was honored to lead a really dedicated team of military; and civilians in this effort which, over two years, saved DOD $400M.

LIEUTENANT COLONEL
SARAH R. RADIN

Lieutenant Colonel Radin graduated from Pennsylvania State University in 1976, where she was a member of the first class opened to women in the Army Reserve Officer Training Corps program. While at Penn State, she was accepted into the flight Indoctrination Program and was the first female in the program to solo in a fixed wing aircraft. After initial assignments in the Transportation Corps, she commanded Headquarters and Alpha Company, 724th Maintenance Battalion, at Fort Stewart, Georgia, and transferred to the Ordnance Corps.

Her next assignment was again at Fort Bragg, this time as the first Ordnance officer in the newly formed 1st Special Operations Command. She served in progressive assignments on the G4 staff -- Operations Officer, Logistics Operation Division, Chief of the Maintenance Branch; and then Assistant G-4.

After two tours in the continental United States, she was ordered to Nuremberg, Germany as the Materiel Officer and then Executive Officer for the 71st Maintenance Battalion.

A tour in the Pentagon followed, where she was assigned as a Logistics Staff Officer in Tank-Automotive Division of the Office of the Deputy Chief of Staff for Logistics, responsible for the rebuilding of the fleet of Bradleys at the National Training Center. Her next assignment was as Executive Officer to the Director of Supply and Maintenance, Deputy Chief of Staff for Logistics.

The culminating assignment in LTC Radin's distinguished career was as commander of the 227th Maintenance Battalion, Seoul, Korea from June 1994 to June 1996. When the Sampoong Department Store collapsed in 1996, soldiers of the 227th were the first on site to start cutting through the debris and begin the rescue of survivors.

MISTER
TIMOTHY C. ZELLO

Mr. Zello served in numerous key positions throughout the Ordnance Center and School. He was an exceptional leader who met every challenge head-on with unfailing, outstanding results. The accolades enjoyed by the U.S. Army Ordnance Center and School for its proactive, dynamic training was due in large to Mr. Zello's personal commitment to excellence. Without his personal involvement, the unique training initiatives and total team effort would have been seriously eroded during a turbulent, tough, resource constrained timeframe.

During the most turbulent period in the history of Ordnance training, both in terms of personnel and equipment resources, Mr. Zello's ability to organize and provide over watch for critical programs of instruction, supporting training aids, and improved facilities ensured that the thousands of students attending the U.S. Army Ordnance Center and School, during his tenure, were provided the highest quality hands-on technical training possible. He played a significant role in the dramatic increase in readiness in the recovery vehicle training fleet. Due to his high level of interest and genuine concern, he assisted in elevating the recovery readiness rate by 44 percent in a mere 6-month period, bringing the operational readiness rate up to 95 percent.

Serving in one of the toughest jobs at the Ordnance Center and School, Mr. Zello demanded and received top performance from instructors and training development personnel in all the training departments. To ensure that USAOC&S had a well-prepared staff and faculty to provide and/or support training, Mr. Zello supervised and personally endorsed a robust faculty development program. He consistently encouraged instructors to advance through the various instructor levels and made sure instructors were publicly recognized and rewarded for their outstanding performance. He also implemented an Observation of Training Program whereby middle and top management personnel routinely observed classes and reported their findings on an observation form. This provided another check on training, but it also provided managers a real-life understanding of training within the school.

One noteworthy training initiative implemented by Mr. Zello is when he acquired the Contact Test Set III, a new piece of test, measurement and diagnostic equipment for the School (first in the Army so equipped) and through active testing and coordination with the Project Manager, made the Ordnance Center and School the Army's test bed for this system. As a direct result of this success, the U.S. Army Ordnance Center and School became the Army's test center for the Tank Turbine Engine Diagnostic System. These two efforts have been instrumental in keeping the Ordnance Center and School on the forefront of technological systems needed to maintain our modern Army.

Mr. Zello was the visionary for Distance Learning. His dynamic, proactive initiatives made teletraining via satellite and computer/Internet a reality at the Ordnance Center and School. Teletraining sites are now operational at both Aberdeen and Edgewood areas. Training is being conducted with units from Fort Hood, TX; Fort Stewart, GA; Fort Dix, NJ; and Fort Sill, OK. Additionally, this state-of-the-art training is being conducted to Sinai, Macedonia and Vilseck. Thus, U.S. Army forces worldwide can receive real-time, interactive training via satellite on demand.

Under Mr. Zello's competent leadership, the image and reputation of the Ordnance School as an educational institution comparable to civilian technical schools was affirmed by the accreditation by the Council on Occupational Education.

Mr. Zello has had an extraordinary impact on the entire Ordnance Corps. He consistently ensured that our soldiers, civilians and allies were well trained to perform at the highest standards. His dedication to selfless service touched the lives of thousands of military and civilian personnel, and is in keeping with the highest tradition of the Ordnance Corps.